



Pioneer Energy Services

# Dual Induction Log

API No.	15-101-22532-00-00	
Company	Larson Engineering, Inc.	
Well	Judy Unit #1-32	
Field	Wildcat	
County	Lane	State
Location	SW NW NW SW 2280' FSL / 37' FWL	
Sec:	32	Twp: 18S Rge: 27W
Other Services	CNL / CDL MEL	

Permanent Datum	Ground Level	Elevation	2697
Log Measured From	Kelly Bushing	7	Ft. Above Perm. Datum
Drilling Measured From	Kelly Bushing		
Date		8/18/2014	
Run Number		One	
Depth Driller		4643	
Depth Logger		4642	
Bottom Logged Interval		4641	
Top Log Interval		250	
Casing Driller		8.625 @ 262	
Casing Logger		260	
Bit Size		7.875	
Type Fluid in Hole		Chemical	
Salinity, ppm CL		4000	
Density / Viscosity		9.2   54	
pH / Fluid Loss		10.5   7.6	
Source of Sample		Flowline	
Rm @ Meas. Temp		0.59 @ 90	
Rmf @ Meas. Temp		0.44 @ 90	
Rmc @ Meas. Temp		0.80 @ 90	
Source of Rmf / Rmc		Charts	
Rm @ BHT		0.43 @ 122	
Operating Rig Time		4 Hours	
Max Rec. Temp. F		122	
Equipment Number		15	
Location		Hays	
Recorded By		R. Barnhart	
Witnessed By		Vern Schrag	

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All interpretations are opinions based on inferences from electrical or other measurements and we cannot and do not guarantee the accuracy or correctness of any interpretation, and we shall not, except in the case of gross or willful negligence on our part, be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees. These interpretations are also subject to our general terms and conditions set out in our current Price Schedule.

### Comments

Thank you for using Log-Tech, Inc.  
(785) 625-3858

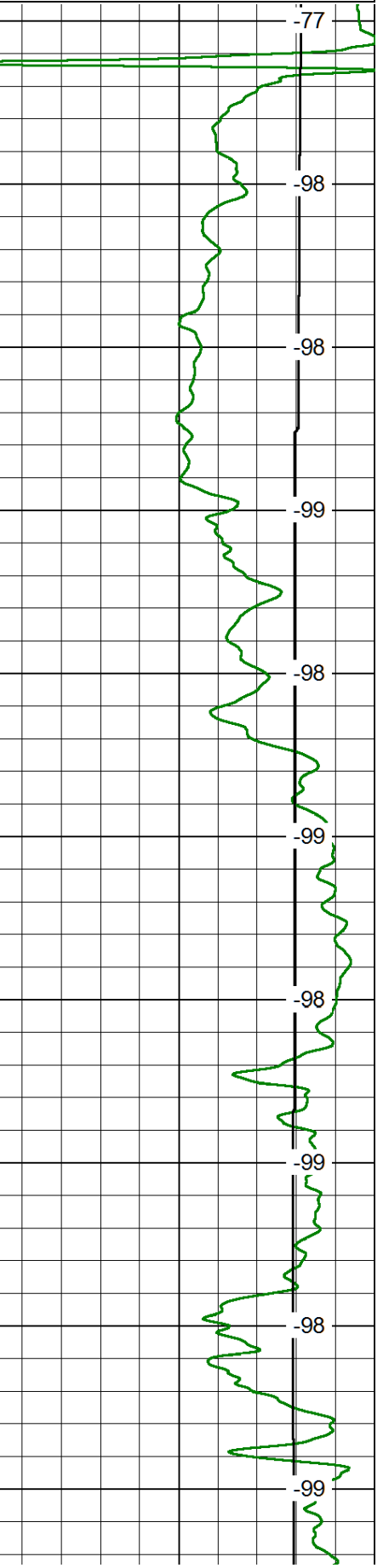
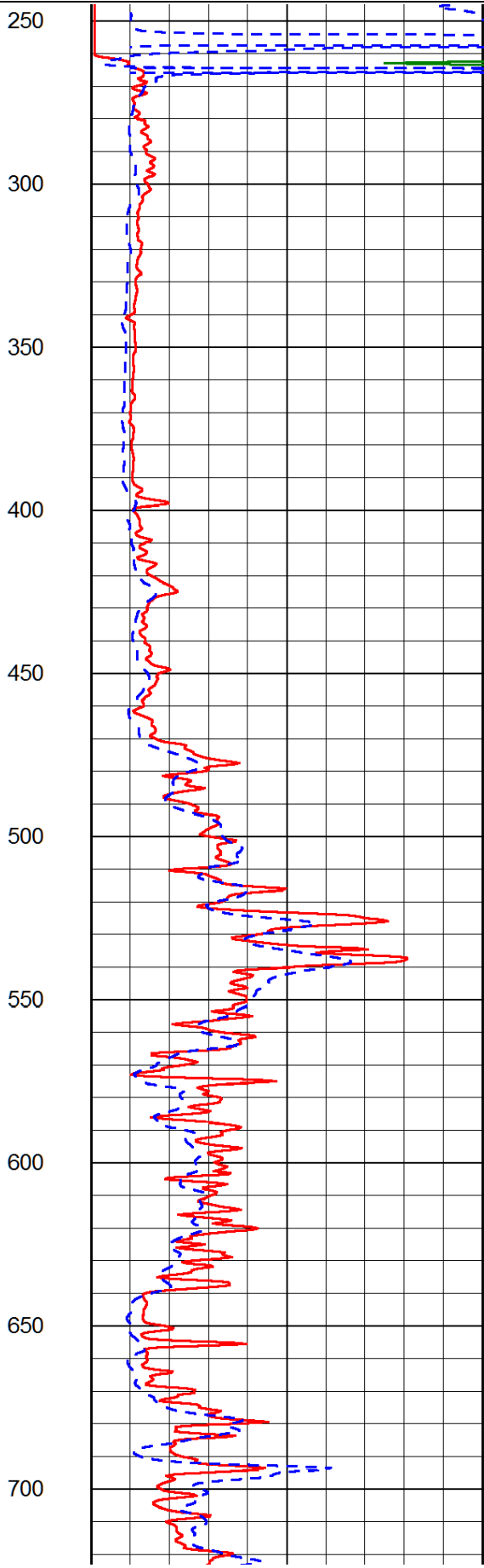
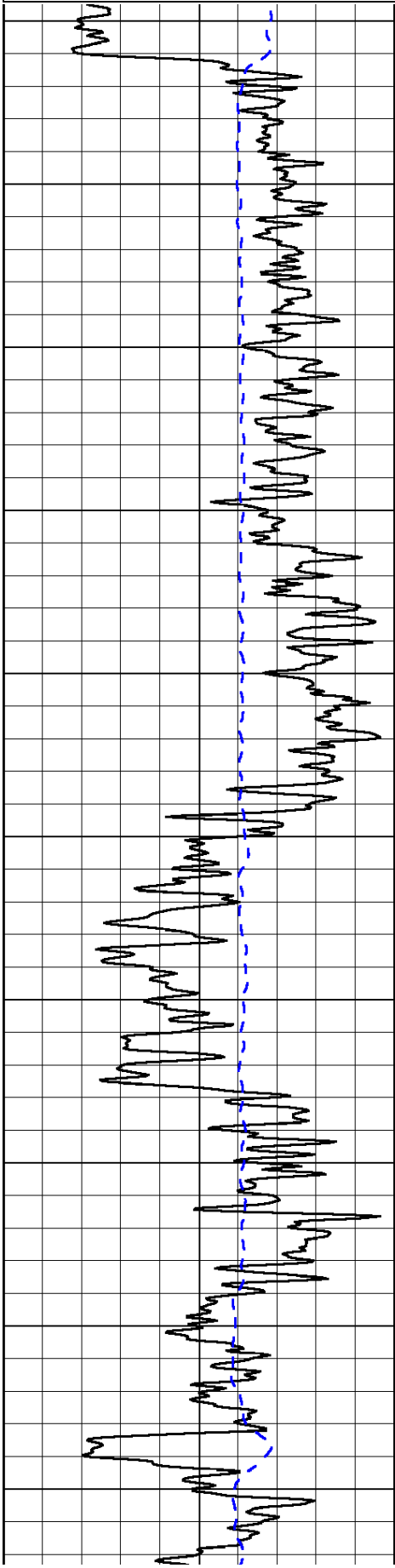
Dighton, KS:  
6E to Quantum Rd., 3S, 3/4E, N into

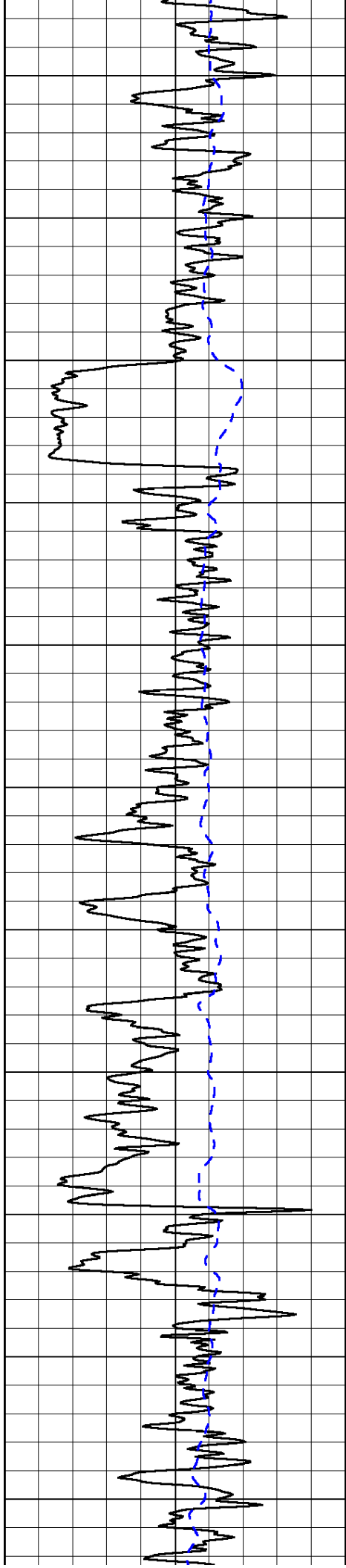
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 Presentation Format: dil2in  
 Dataset Creation: Sun Aug 17 23:45:43 2014  
 Charted by: Depth in Feet scaled 1:600

0 Gamma Ray 150  
-200 SP (mV) 0

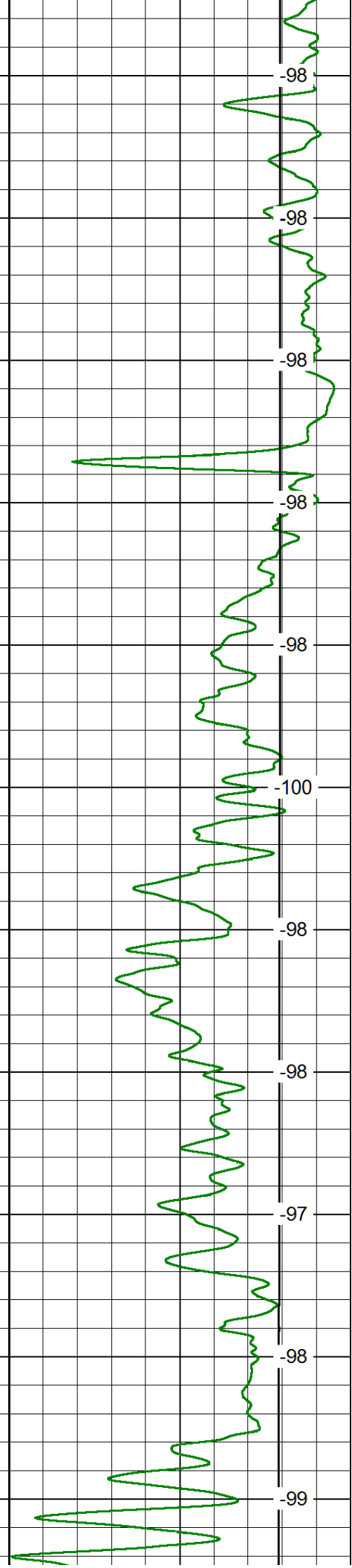
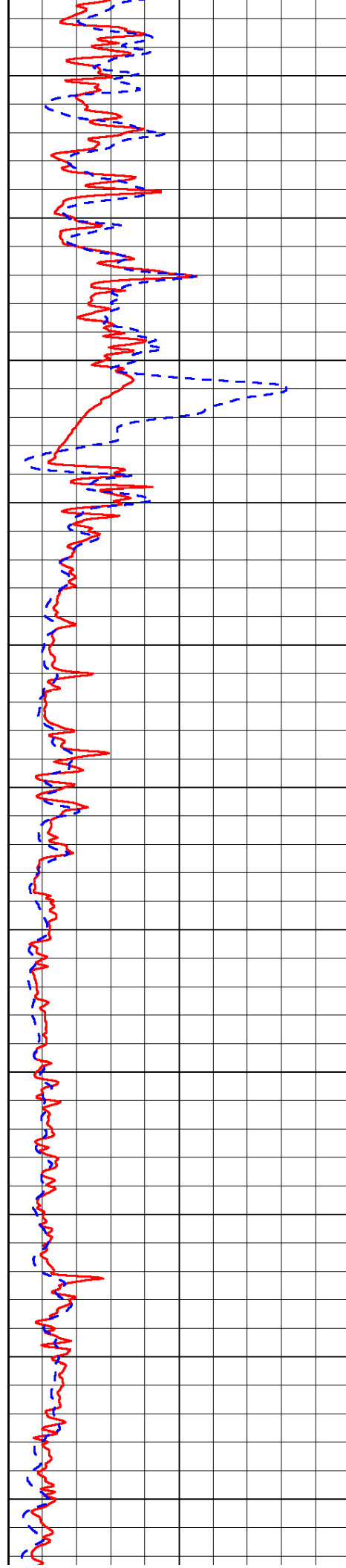
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0 Deep Resistivity 50  
1000 Conductivity 0  
15000 Line Tension 0  
50 Shallow Resistivity 500  
50 Deep Resistivity 500

LSPD

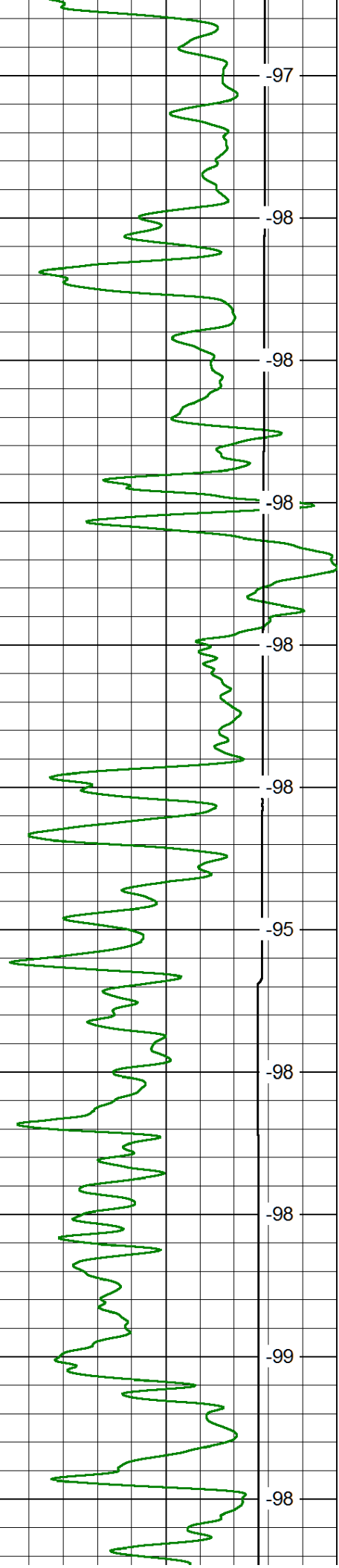
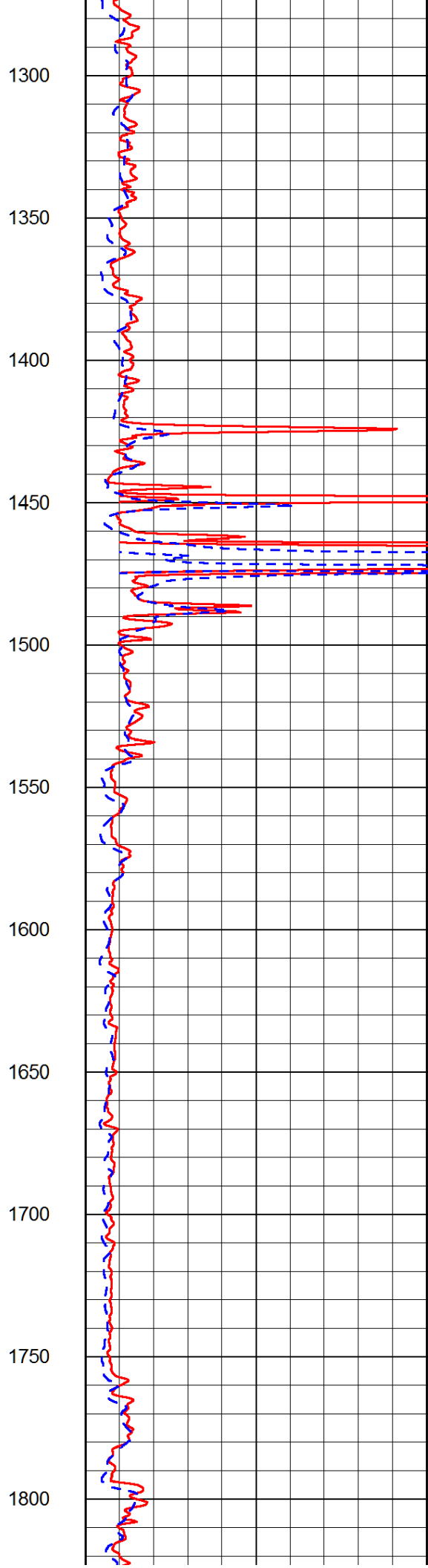
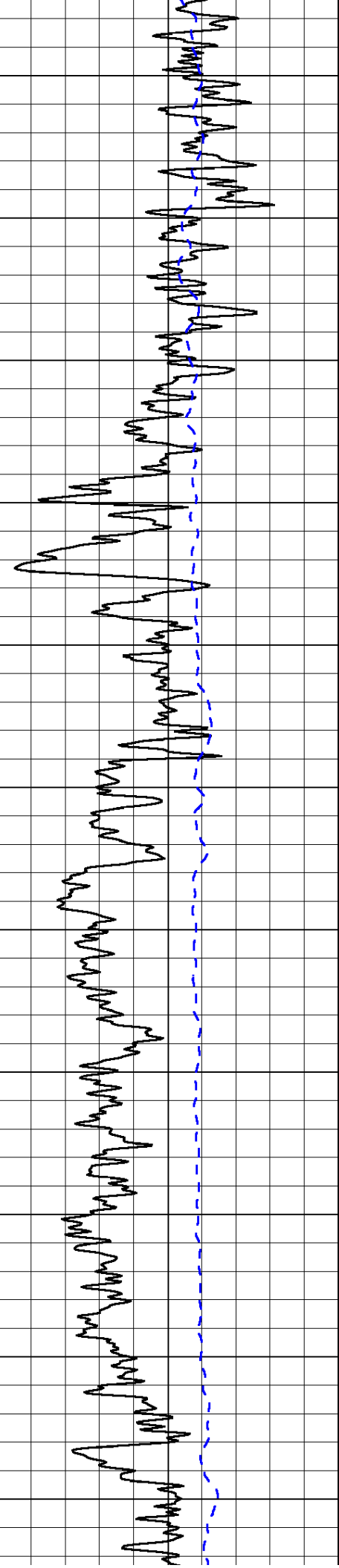


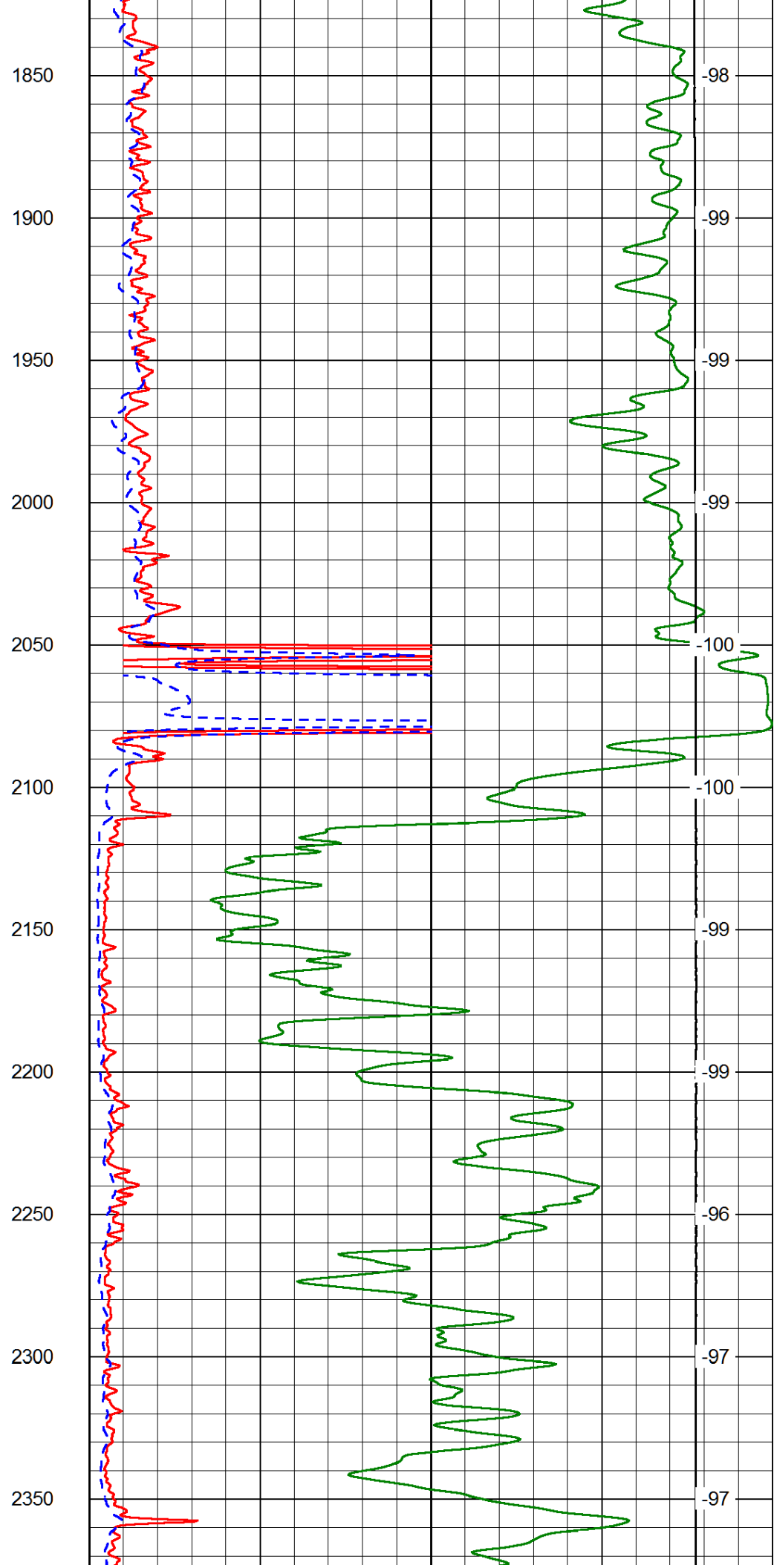
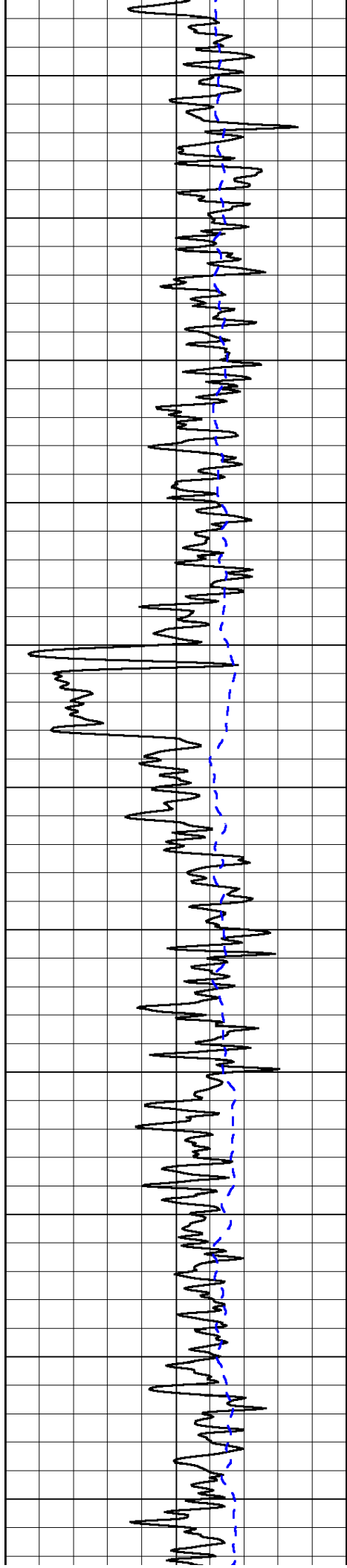


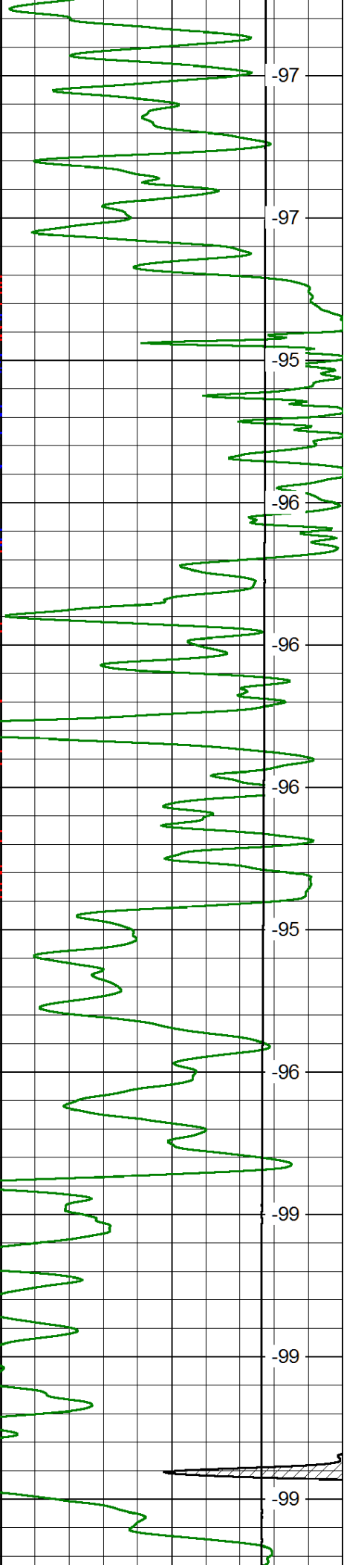
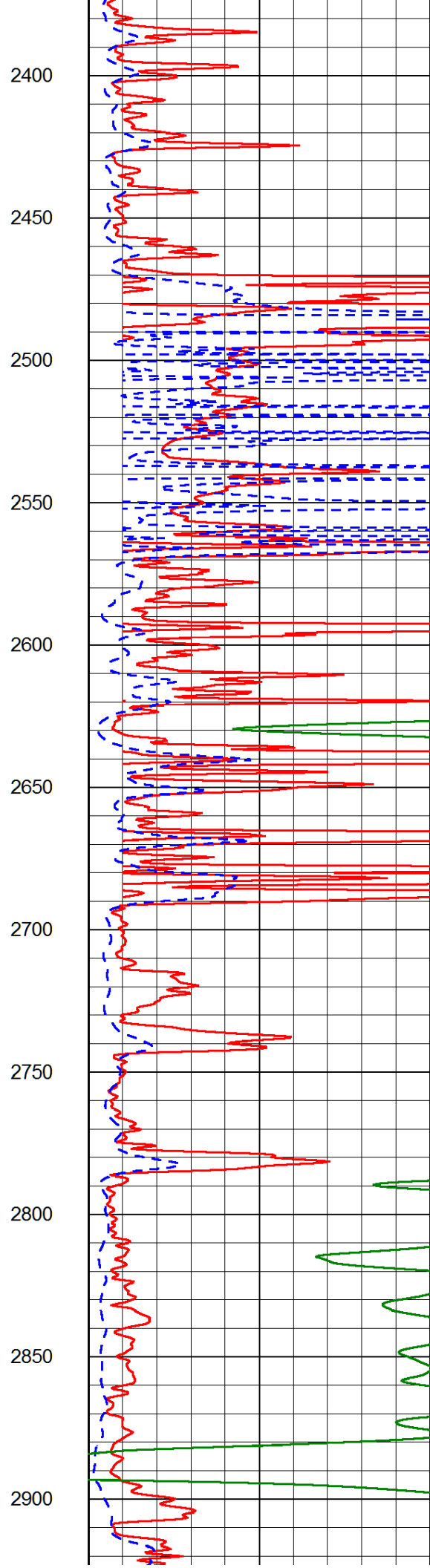
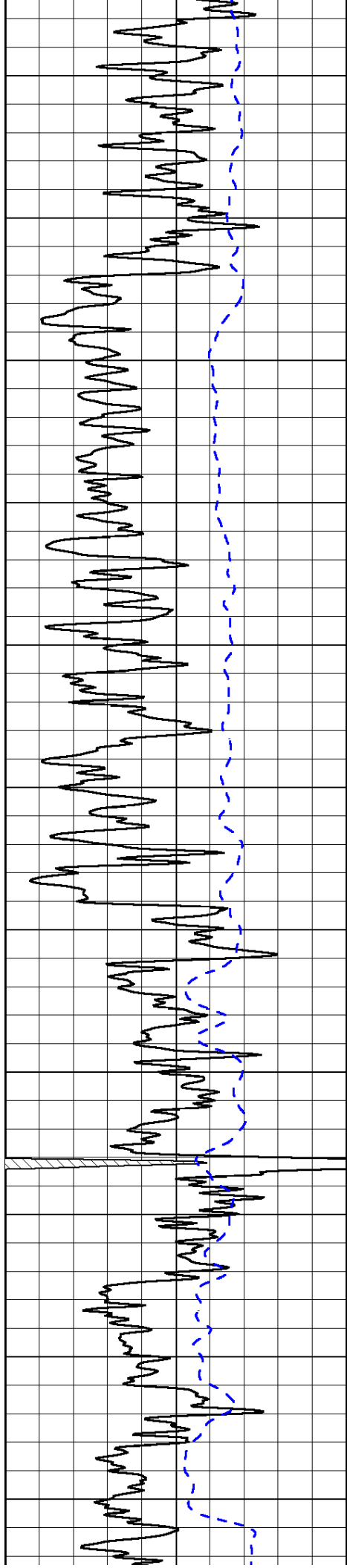
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800  
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1050  
1100  
1150  
1200  
1250

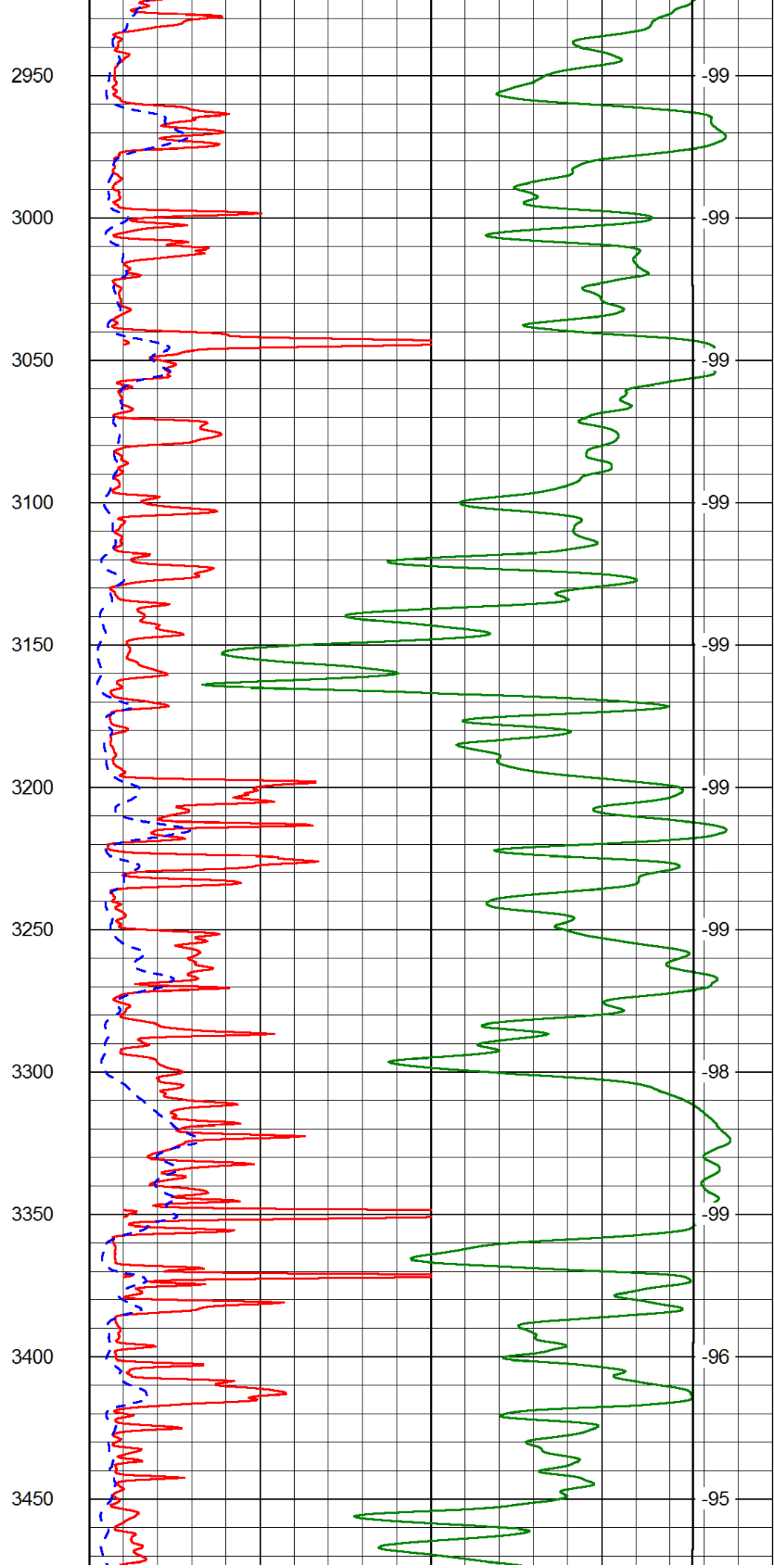
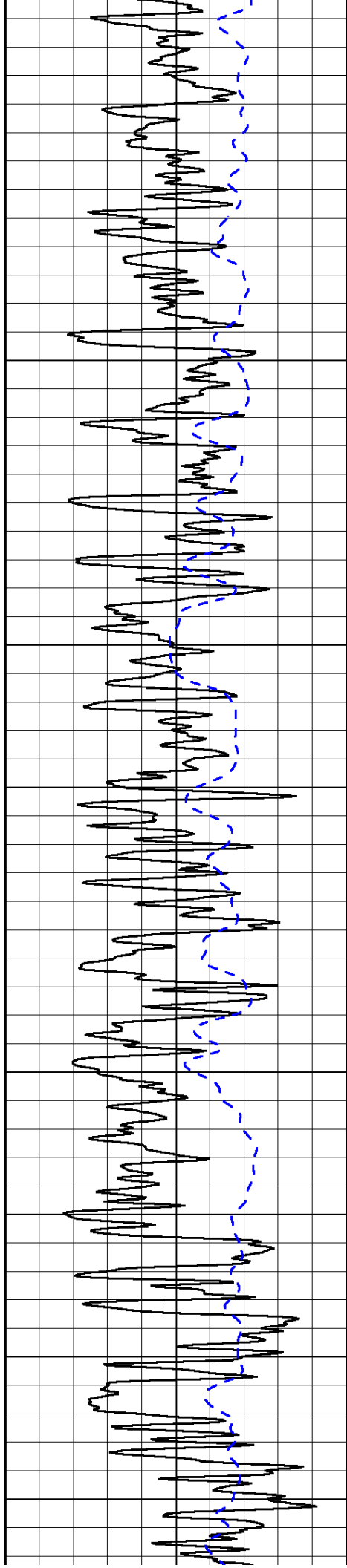


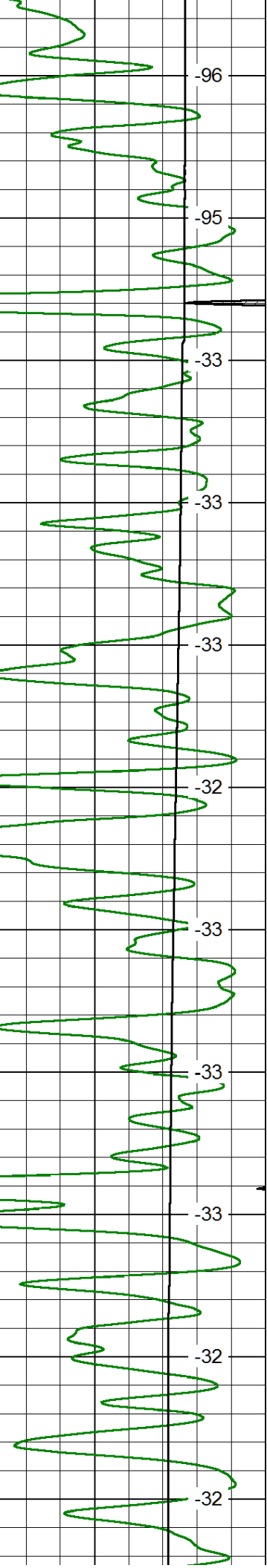
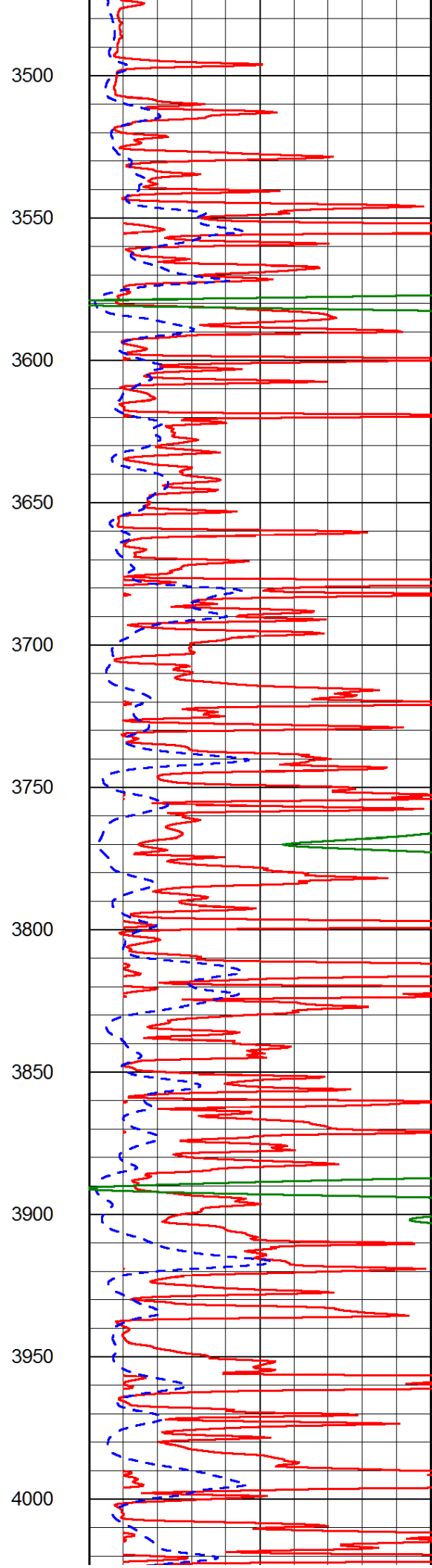
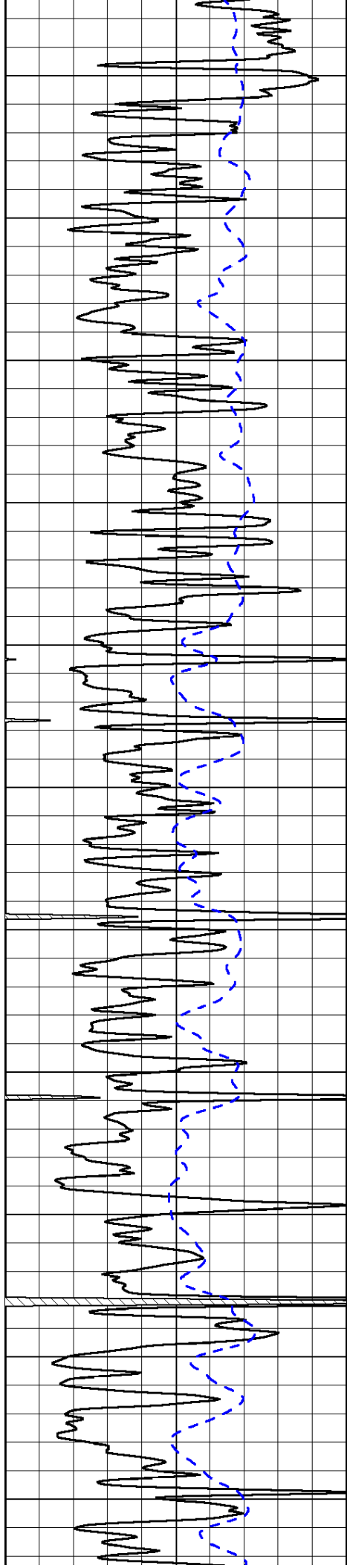
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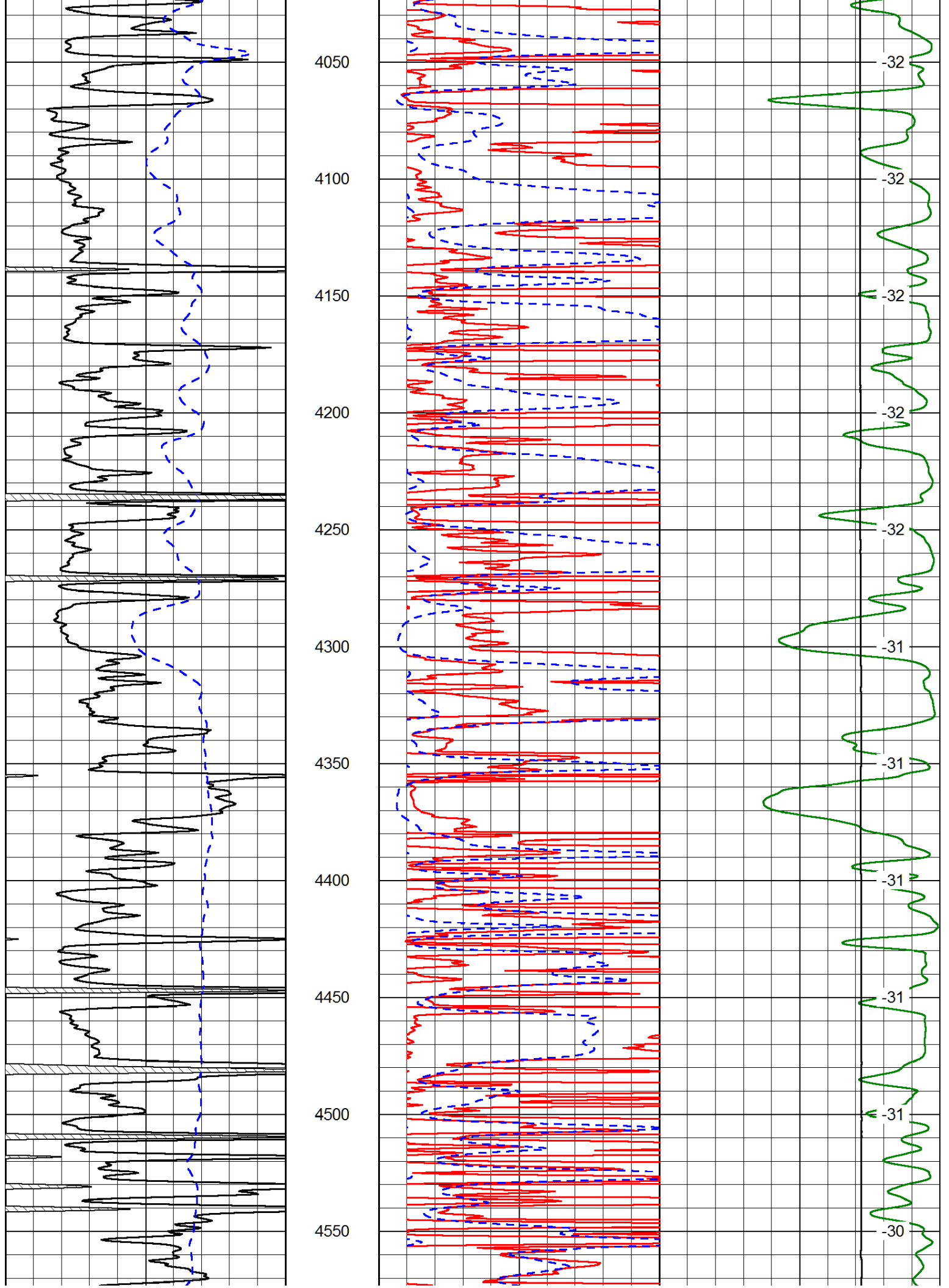


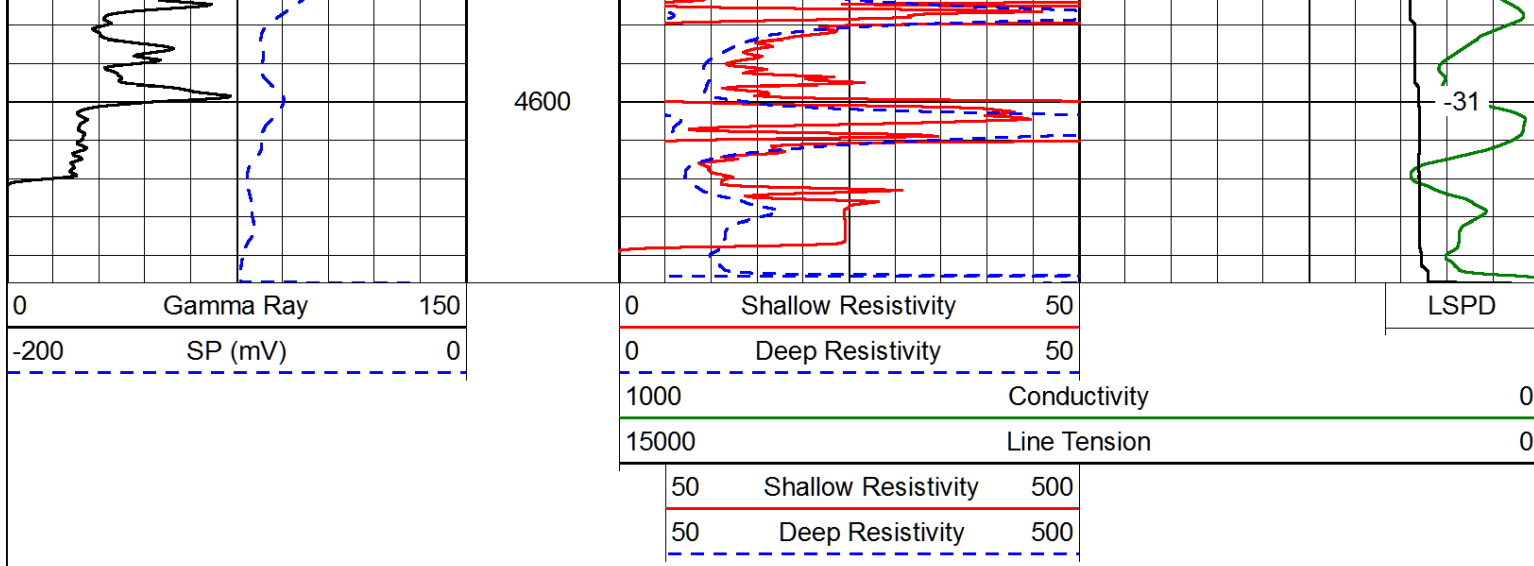




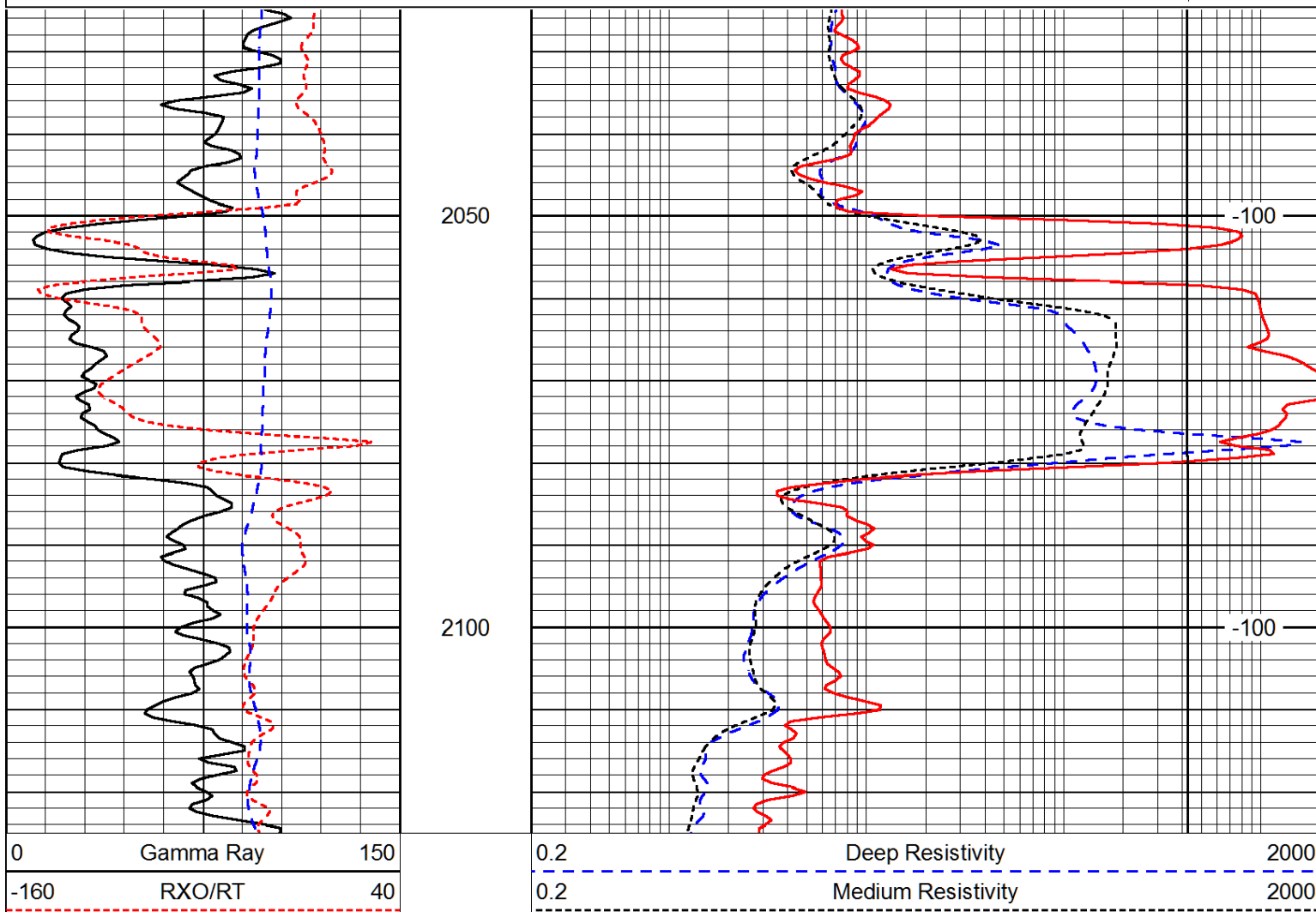
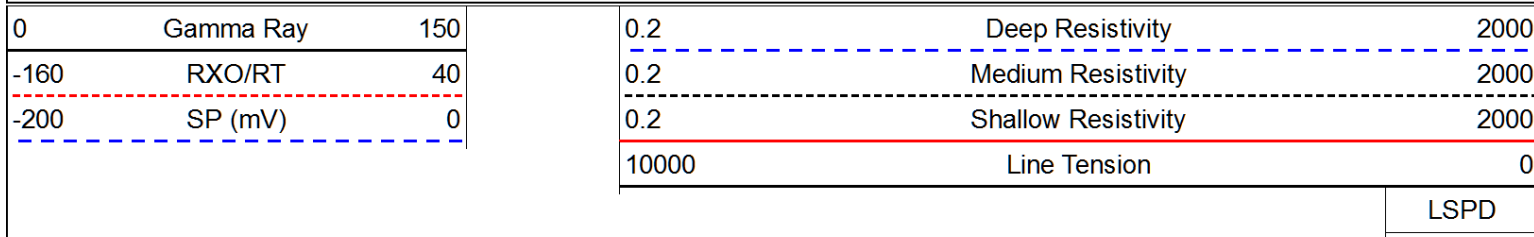








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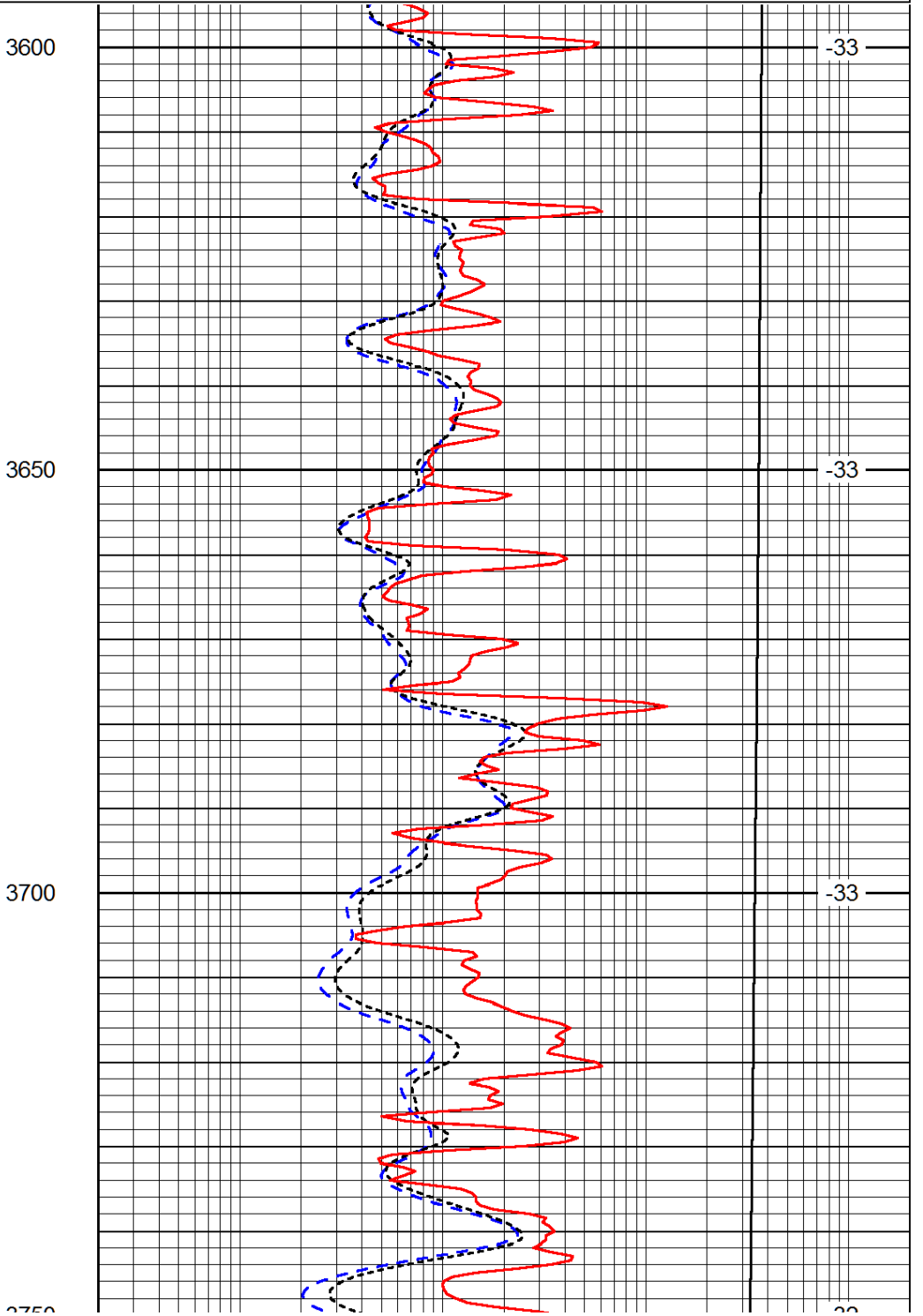
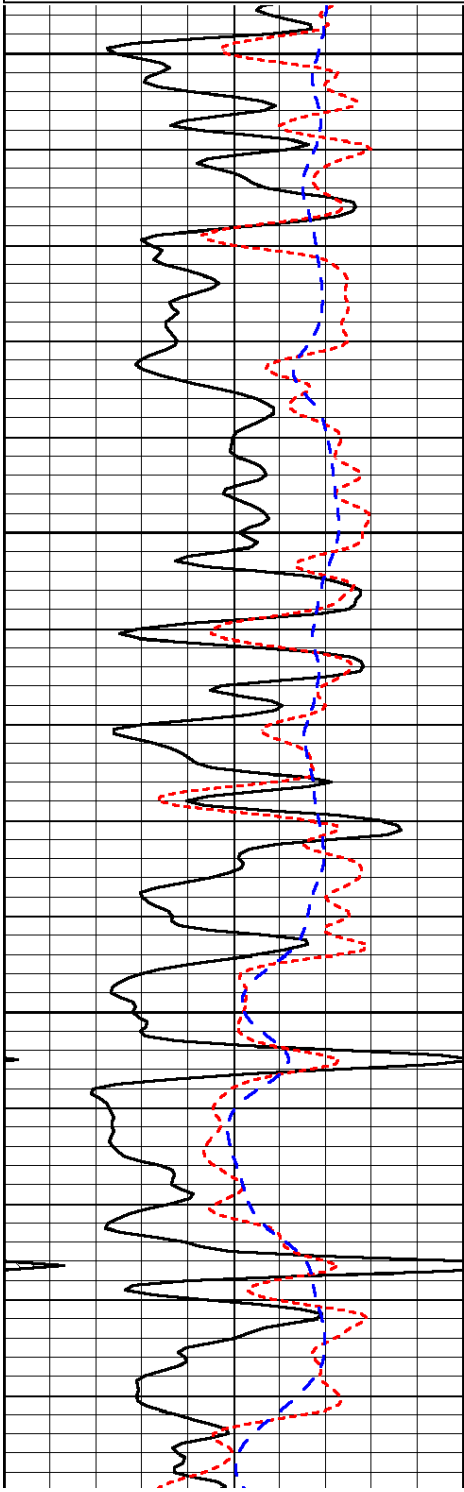
-200	SP (mV)	0
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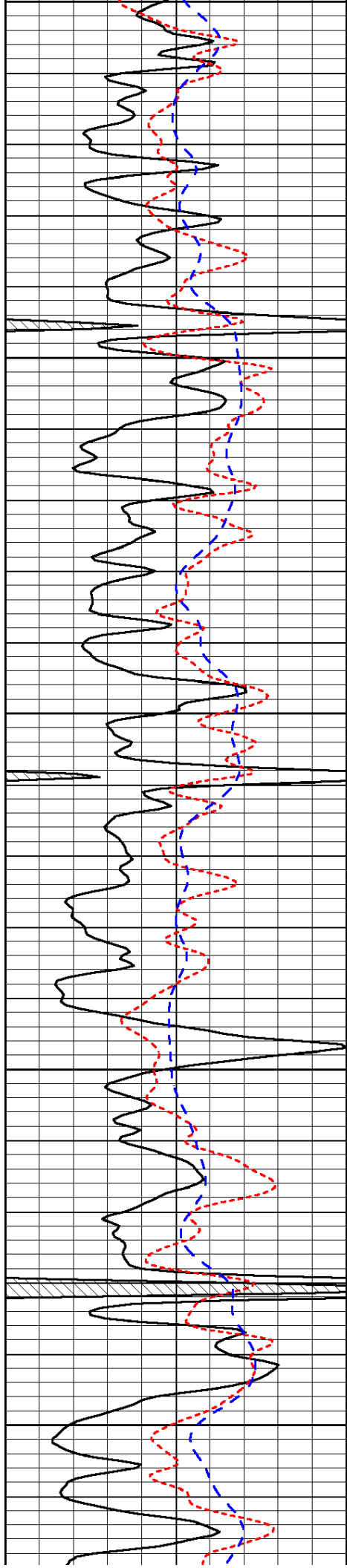
0.2	Shallow Resistivity	2000
10000	Line Tension	0
		LSPD

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 Presentation Format: dil  
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 Charted by: Depth in Feet scaled 1:240

0	Gamma Ray	150
-160	RXO/RT	40
-200	SP (mV)	0

0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0
		LSPD





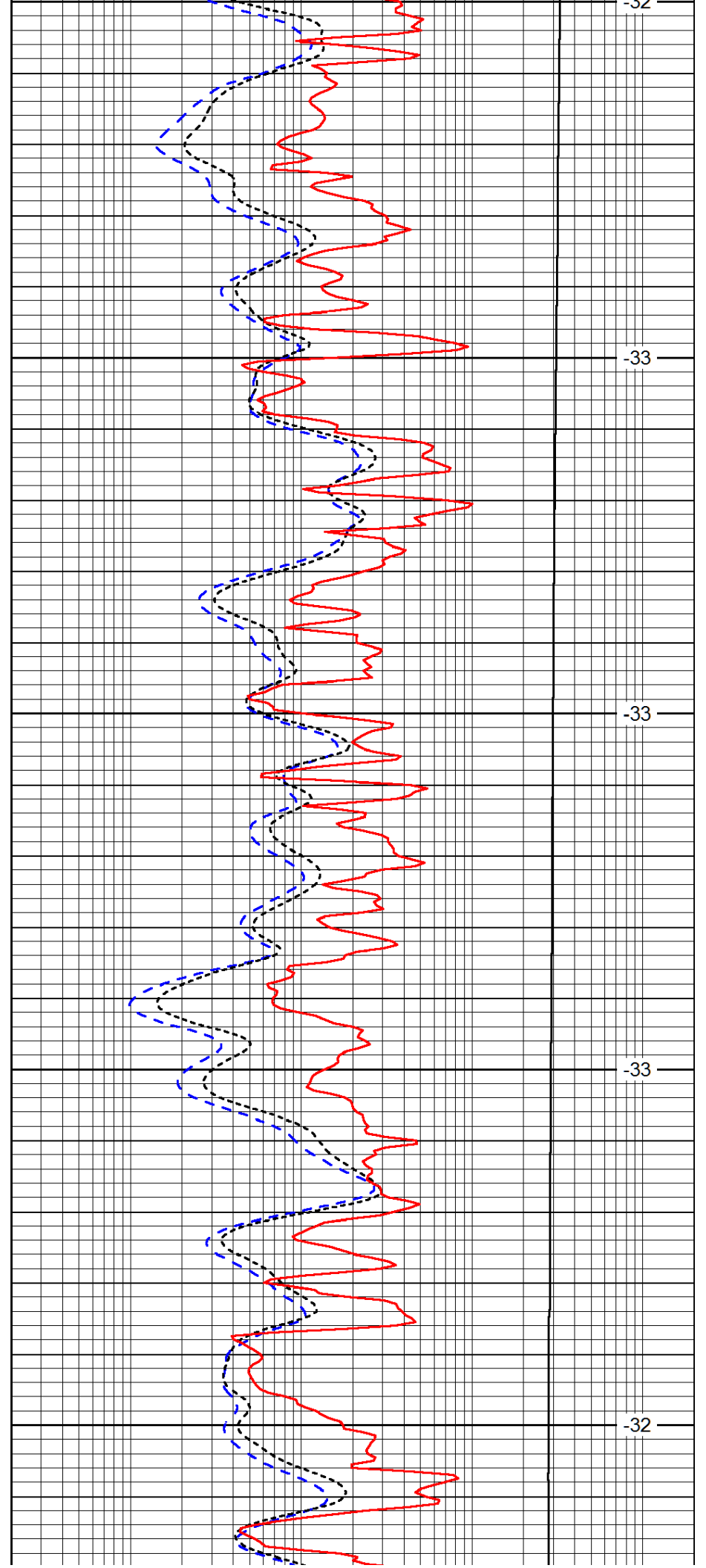
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3800

3850

3900

3950



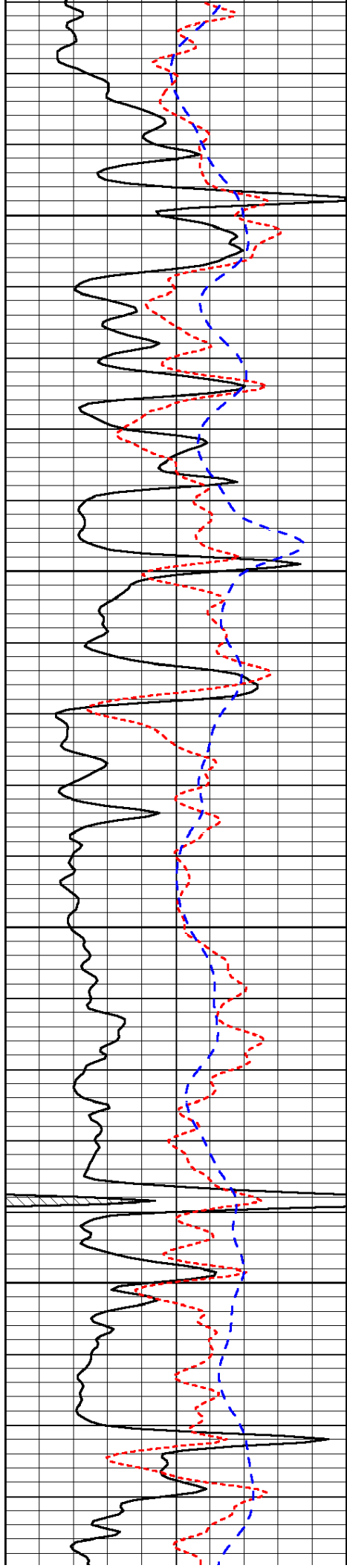
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-33

-33

-33

-32

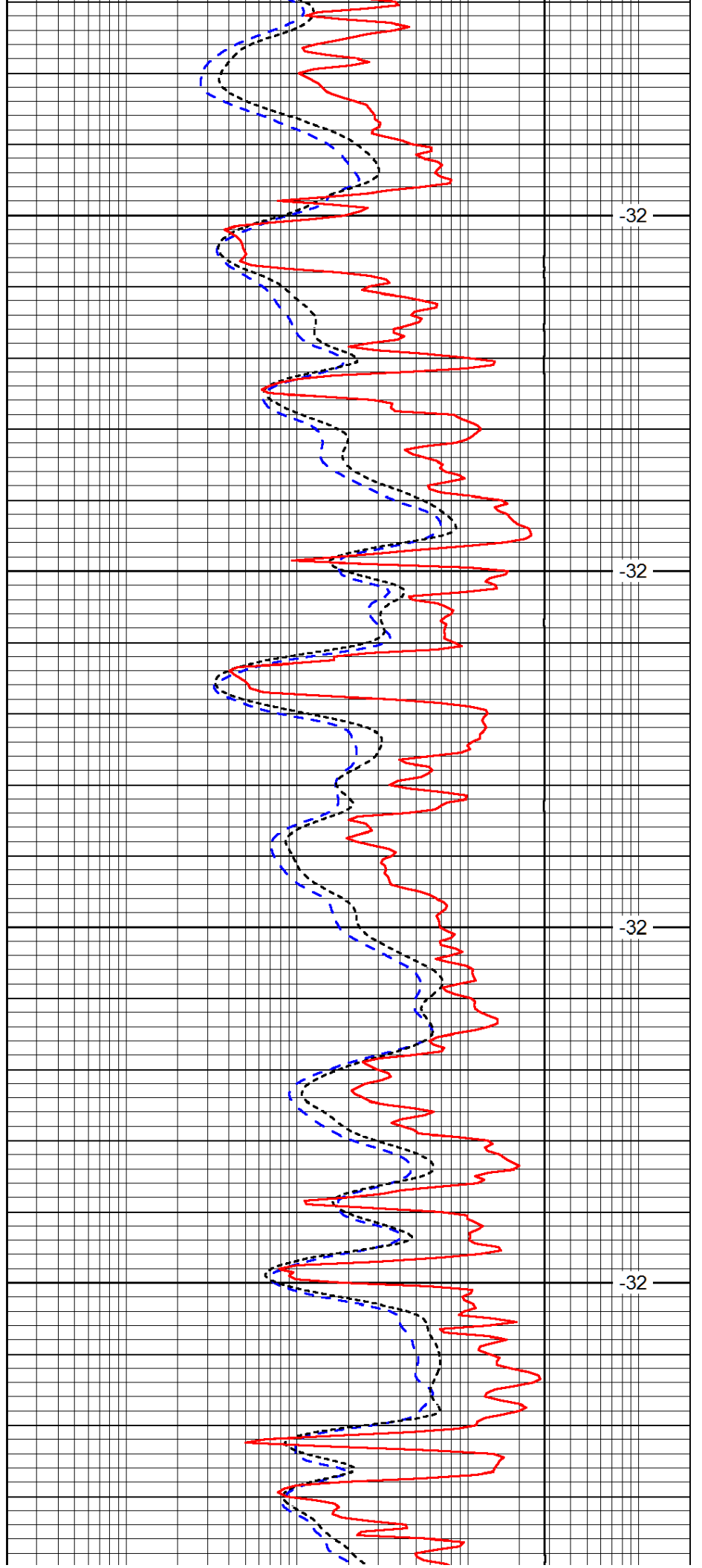


4000

4050

4100

4150

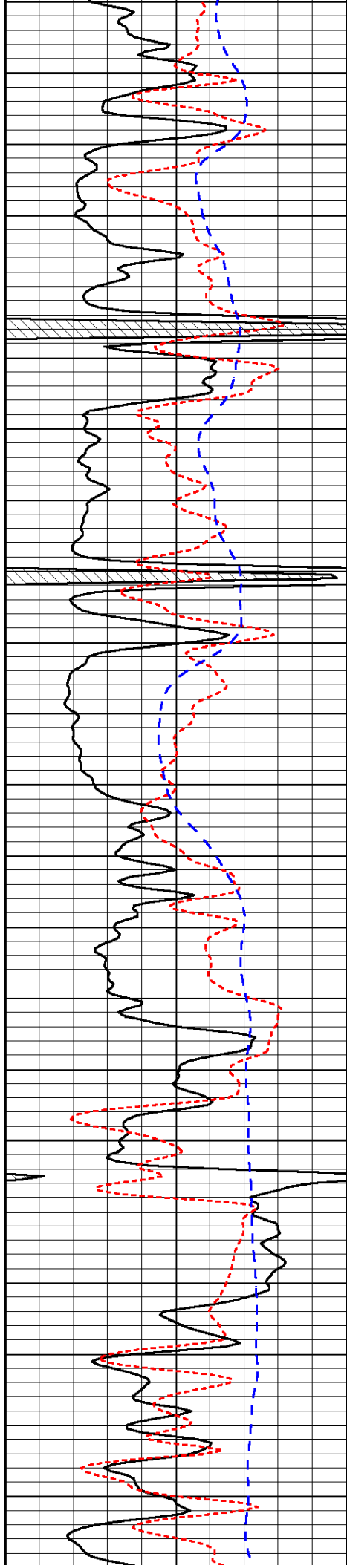


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-32

-32

-32



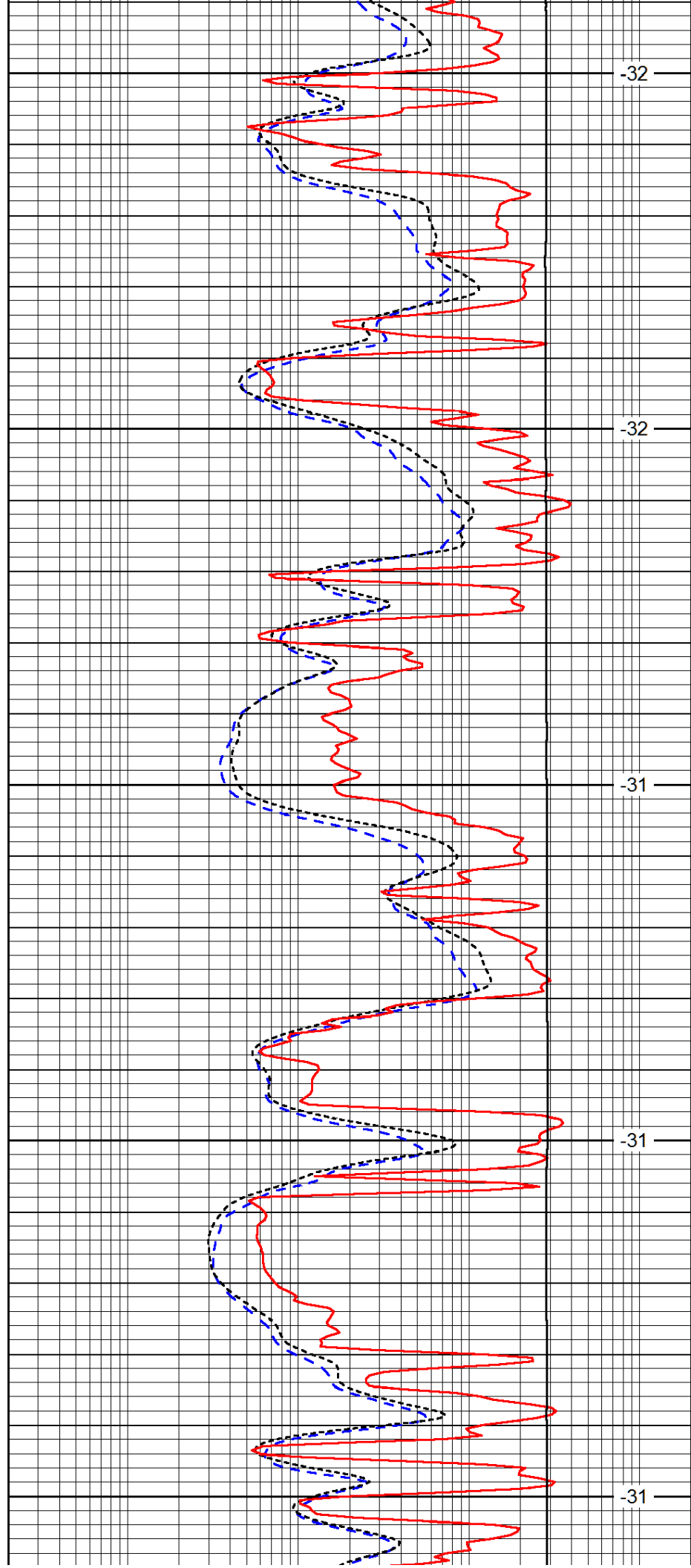
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4250

4300

4350

4400



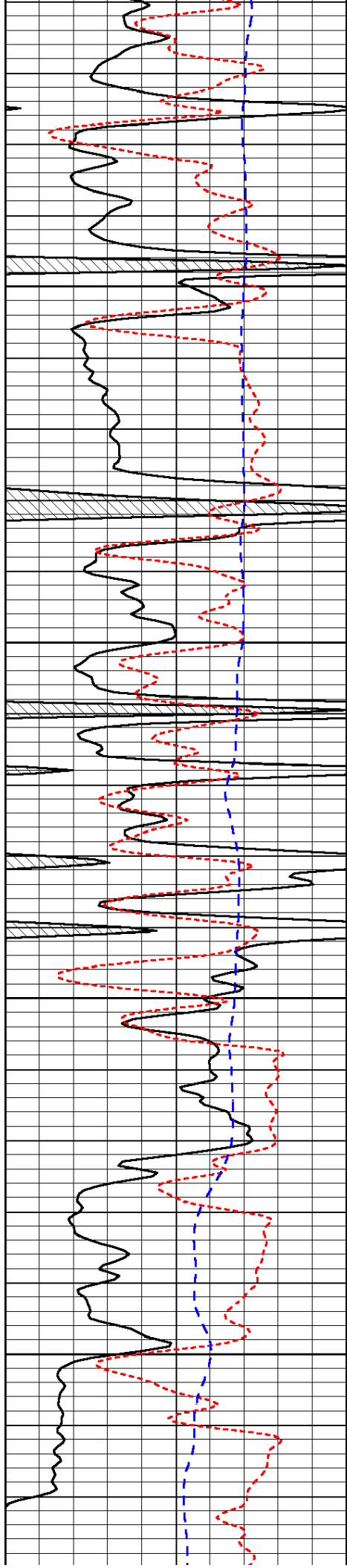
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-31

-31

-31

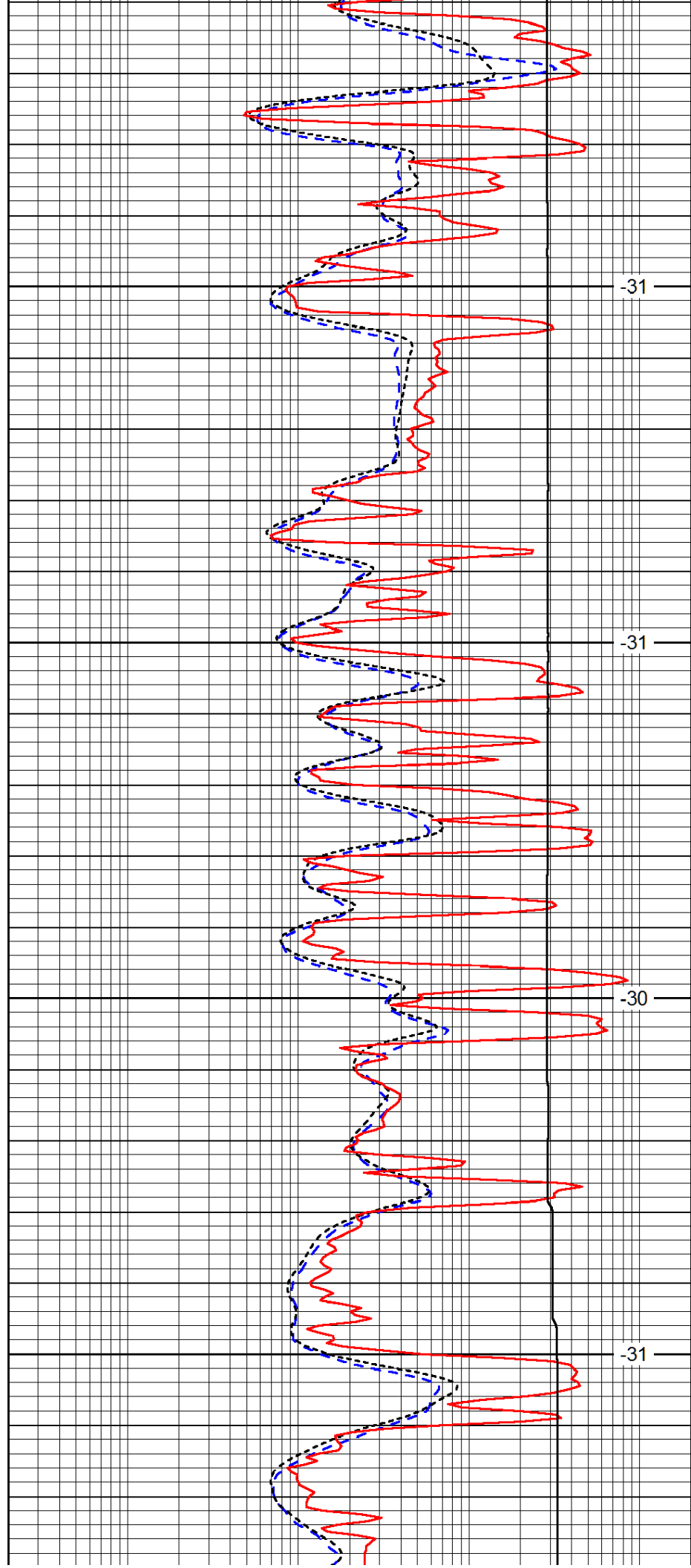


4450

4500

4550

4600

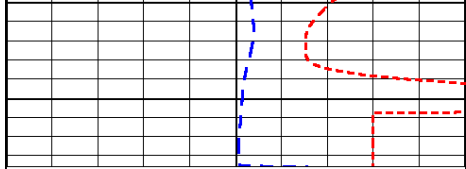


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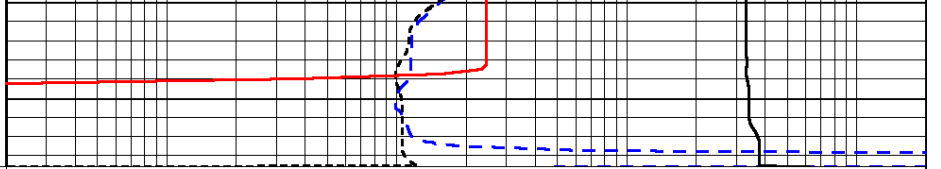
-31

-30

-31



0	Gamma Ray	150
-160	RXO/RT	40
-200	SP (mV)	0



0.2	Deep Resistivity	2000
0.2	Medium Resistivity	2000
0.2	Shallow Resistivity	2000
10000	Line Tension	0

LSPD